DRAFT ENVIRONMENTAL ASSESSMENT

Yreka, California to Klamath Falls, Oregon Fiber Optic Cable Project

(Descriptive Title for Proposed Action)

Klamath Basin National Wildlife Refuges

(FWS Unit Proposing Action)

National Environmental Policy Act
Code of Federal Regulations, Title 50, Part 29

(Legal Mandate under which Action Will be Carried Out)

Lower Klamath National Wildlife Refuge
Klamath County, Oregon

(Location of Action)

JBR Environmental Consultants Inc.

(Author of Document)

July, 2001

(Date Prepared)

Section I: PURPOSE AND NEED FOR ACTION

1. Why is action being considered ? (Discuss problems, opportunities, needs)

In order to improve and expand its service, the California-Oregon Telephone Company (Cal-Ore) proposes to extend an existing fiber optic line from Indian Tom Lake, California to Klamath Falls, Oregon, and from Macdoel, California, to Yreka, California (the Project Figure 1). The Project would occur adjacent to existing roads. A portion of the Project, approximately 0.75 miles, would cross the Lower Klamath National Wildlife Refuge (Refuge) within the U.S. Highway 97 (Highway) right-of-way (Project Area, Figure 2). The Project Area within the Refuge is located in Willamette Meridian, T41S R8E Sections 4, 9, and 16. The Project alignment is within the Highway right-of-way approximately 20 feet to 30 feet from the roadway.

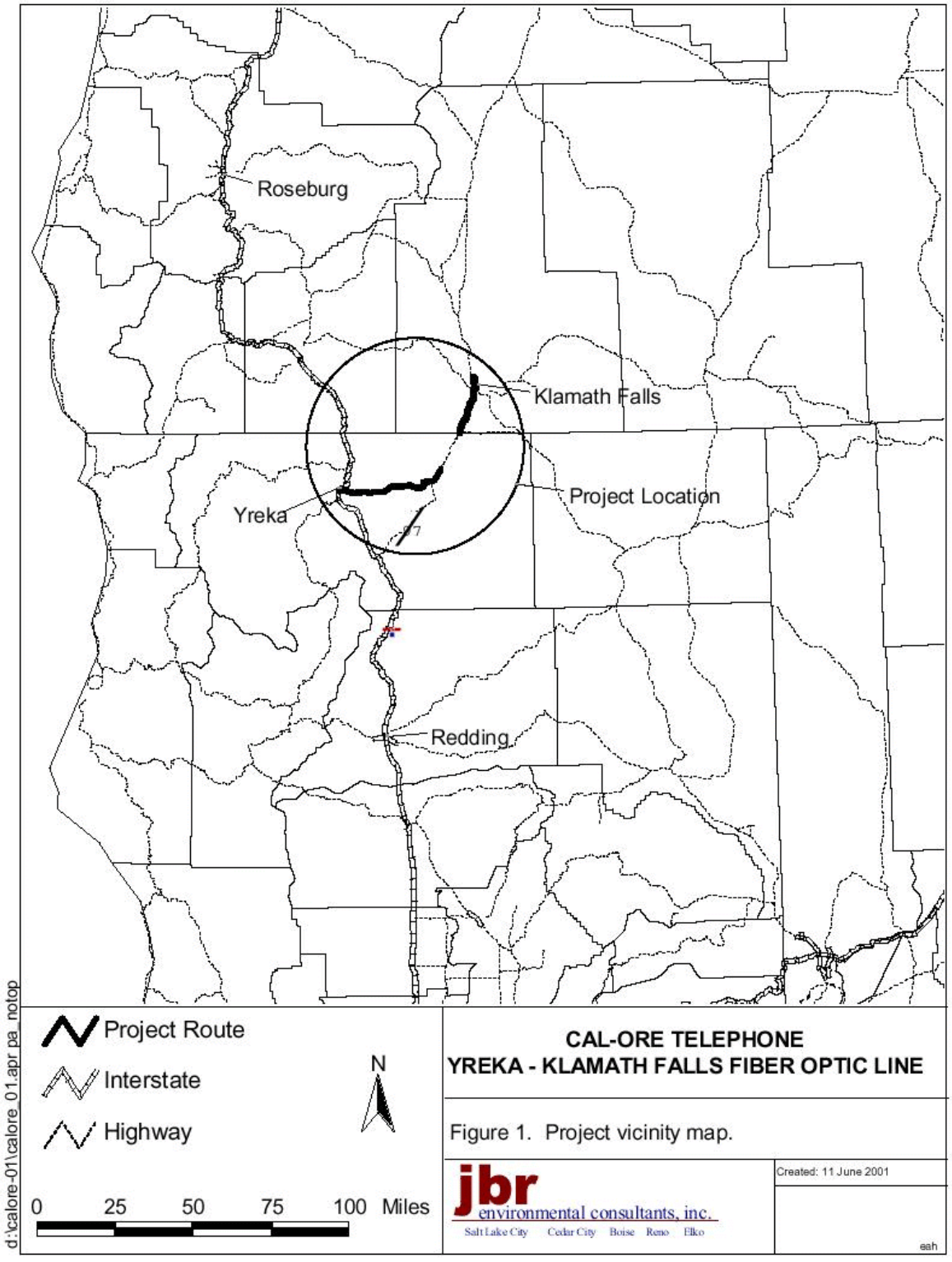
2. How does the action relate to Service objectives?

The U.S. Fish and Wildlife Service (Service) allows rights-of-ways for the public good across Service lands where resources are not significantly impacted.

3. What is the action supposed to accomplish?

The installation of the fiber optic line between Yreka and Klamath Falls would result in improved telecommunication service for existing subscribers, would provide for additional growth within Cal-Ore's service area and provide upgraded service to residences located along the route. In addition, the Project would position Cal-Ore to provide future network enhancements such as wideband data transfer and high-speed internet access to the communities (e.g., schools, businesses, etc.) between Klamath Falls and Yreka.

(Figure 1)


Roseburg
Klamath Falls
Project Location
Yreka
Redding
Project Route
Interstate
Highway
N
0 25 50 75 100 Miles
CAL-ORE TELEPHONE
YREKA - KLAMATH FALLS FIBER OPTIC LINE
Figure 1. Project vicinity map.
jbr environmental consultants, inc.
Salt Lake City Cedar City Boise Reno Elko
Created: 11 June 2001
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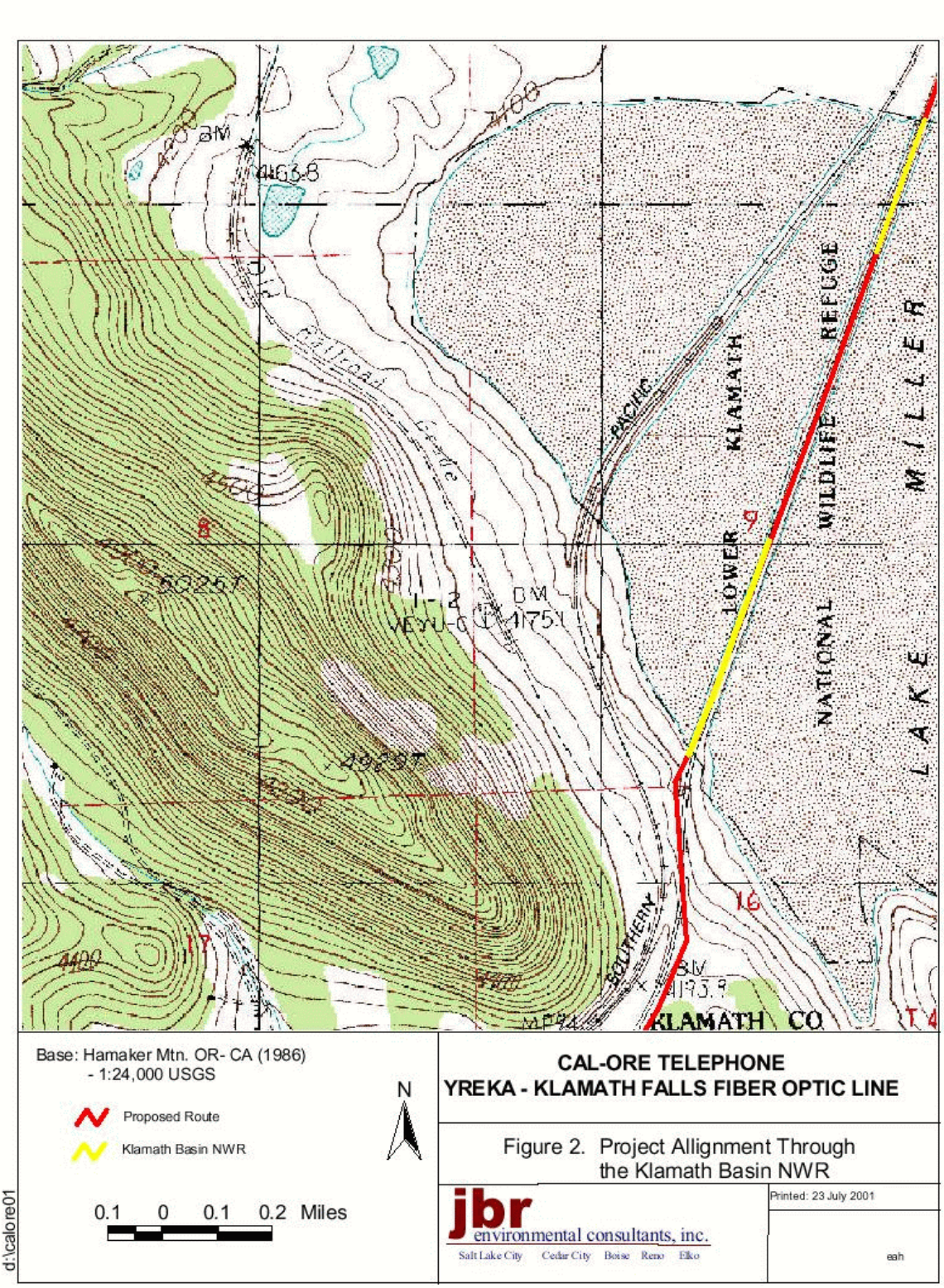
(Figure 2)


LOWER KLAMATH NATIONAL WILDLIFE REFUGE
LAKE MILLER
Railroad Grade
PACIFIC
SOUTHERN
KLAMATH CO
Base: Hamaker Mtn. OR- CA (1986)
- 1:24,000 USGS
Proposed Route
Klamath Basin NWR
0.1 0 0.1 0.2 Miles
N
CAL-ORE TELEPHONE
YREKA - KLAMATH FALLS FIBER OPTIC LINE
Figure 2. Project Allignment Through
the Klamath Basin NWR
jbr
environmental consultants, inc.
Salt Lake City Cedar City Boise Reno Elko
Printed: 23 July 2001
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Section II: ALTERNATIVES INCLUDING THE PROPOSED ACTION
(Identify one of the alternatives as the preferred alternative.
Add alternatives as necessary.)

A. No Action Alternative

1. Describe this alternative.

Cal-Ore would not be allowed a right-of-way passage across the Refuge to install a fiber optic telephone cable from Klamath Falls, Oregon to Yreka, California.

2. To what extent would this alternative satisfy the problems, opportunities or needs identified in Section I?

The fiber optic cable could not be practically installed without a right-of-way across Refuge. Alternative routing around the refuge would be cost prohibitive. In addition, the opportunity to negatively impact significant archeological sites or natural resources would be increased. The opportunity for the communities between Klamath Falls and Yreka to experience the benefits of improved telephone telecommunication services would not be realized.

3. What are the principal environmental (biophysical) effects associated with implementation of this alternative? (Summarize effects from Section IV.)

There would be no impacts on any of the wildlife resources within the Refuge. Some minor disturbance to grassland/wet meadow vegetation will occur.

4. What are the principal socioeconomic effects associated with implementation of this alternative? (Summarize effects from Section IV.)

The communities between Yreka and Klamath Falls would not be able to experience the benefits of improved telecommunication service.

5. Would implementation of this alternative likely result in significant controversy? Explain.

The proposed project is not likely controversial, however, the local communities may not react positively if the enhanced telecommunication features were unavailable to them because the Service would not grant a right-of-way.

B. Grant right-of-way for fiber optic cable (preferred Alternative)

1. Describe this alternative.

Cal-Ore would be allowed to install the fiber optic line on the Highway right-of-way across the Refuge. The installation process would involve the use of heavy construction equipment including large tractors, cable plows, trenchers, backhoes, and reel equipment trucks. Depending on topography and other physical characteristics of the landscape, buried cable would be installed using one or more of the following three methods: plow, trench, and directional bore. The line would be buried at a depth of approximately 36 inches. Cables installed by plowing is accomplished by creating a narrow slit, generally 2" to 4" wide with a special plow. After plowing and cable installation, the trench is generally closed by driving a tractor track along the slit to seal the surface.

Environmentally sensitive areas, such as wetlands or cultural sites, would be avoided by using the directional bore method. However, in some cases (ie., the wetland is too long to bore under, such as the Miller Lake wetland area) trenching or plowing across the wetlands may be necessary. Associated structures such as above ground pedestals (8 inches in diameter and 36 inches tall) and buried hand holes (4 feet wide x 4 feet long x 4 feet tall) may also be constructed along the alignment within the Refuge. Pedestals and/or hand holes would be installed at strategic locations (e.g., splice stations) along the alignment and would serve to provide maintenance personnel access to the line. All standard safety practices associated with construction along a high speed public highway would be observed.

2. To what extent would this alternative satisfy the problems, opportunities or needs identified in Section I?

The completion of the Cal-Ore fiber optic line installation project through the Refuge would provide updated telecommunication service between Yreka and Klamath Falls. By placing the cable along the existing Highway right-of-way, there would be no additional negative impacts on biological and cultural resources on the Refuge. The U.S. Army Corps of Engineers (Corp) 404 requirements are satisfied by Nationwide Blanket Permit 12, which among other things, allows the minor discharge of materials into wetlands as a result of utility line bedding and backfilling. Cal-Ore and its contractors would be responsible for implementing mitigation measures including using effective erosion control measures, therefore, the processes of cable installation being used for this project is unlikely to create any discharge into wetlands.

3. What are the principal environmental (biophysical) effects associated with implementation of this alternative? (Summarize effects from Section IV.)

Surface disturbance associated with the project is expected to be minimal. All disturbed soil associated with boring and plowing would be replaced and restored to match pre-construction conditions. Disturbed soils would likely naturally revegetate within one or two growing seasons. The construction schedule would occur in the fall so as not to interfere with the reproductive cycles of sensitive plants and animals. Construction activities would halt during periods when the soil is too wet to support equipment. Noise and disturbance above the normal vehicular traffic would not be measurable. No known additional impacts on biological resources would be expected.

4. What are the principal socioeconomic effects associated with implementation of this alternative? (Summarize effects from Section IV.)

The preferred action is the most cost effective for the fiber optic line installation. The upgraded telecommunication services in the local communities would result in improved human health and other public services.

5. Would implementation of this alternative likely result in significant controversy? Explain.

The project is unlikely to create controversy. The completion of the project would benefit telephone users with no negative impacts on biological or cultural resources.

Section III: AFFECTED ENVIRONMENT

Succinctly describe the area in which the proposed action is to occur. If the action will occur on a National Wildlife Refuge or National Fish Hatchery, attach the Refuge/Hatchery public information leaflet to help orient the reader to the general vicinity. For site-specific proposals, include page-sized maps of the general area and the project site. Particular mention should be made of the presence (or absence) of any endangered or threatened species or their critical habitat, historic or cultural resources, parklands, prime or unique farmlands, wetlands, 100-year flood plains, wild and scenic rivers, or other ecologically critical areas (e.g., wilderness areas, research natural areas, etc.)

The affected area within the Refuge will be a narrow zone alongside Highway 97 where it crosses the Refuge (approximately 0.75 miles). The Project Area, which crosses the Refuge in a northeast-southwest direction, is situated adjacent to the Highway which bisects the dry Lake Miller bed near the California-Oregon state border. Almost the entire length of the Project alignment goes through the lake bed which is partially privately owned and partially part of the

Refuge. An archeological Class I and Class III investigation has been completed for the Project Area. The results will be referred to the State Historic Preservation Officer for clearance to proceed with the project. The Project Area does not contain areas of critical habitat, parklands, prime or unique farmlands, 100 year flood plains, or wild and scenic rivers.

JBR Environmental Consultants Inc. (JBR) conducted a wetlands and waters of the United States (WOUS) survey along the Project alignment. The Project Area is almost located entirely within the dry Lake Miller bed and has been classified as a wetland.

Section IV: ENVIRONMENTAL CONSEQUENCES

Develop the analysis for this section by referring to the checklists in Appendices A and B. For each alternative, discuss any item answered "Yes" in either the Significance Checklist or the General Environmental Checklist. Where adverse effects are identified, discuss any proposed mitigating measures. (Add pages to this section as necessary.)

Alternative A: Under the No Action Alternative, there would be no impact on threatened or endangered species. Cultural resources would not be impacted. There would be no measurable effect on the biological environment. Local communities would not be able to take advantage of the improved telecommunication services which the fiber optic line would provide, such as benefits to human health and other public services.

Alternative B: Under the Proposed Action Alternative, Cal-Ore would be allowed the install a fiber optic cable through the Refuge. There would be no impact to Threatened or Endangered species. Although there are many wildlife species, including listed species that use the Refuge, the activities associated with the Project would create disturbance not unlike routine road maintenance activities associated with the current Highway 97 right-of-way. Cultural sites identified along the alignment would not be impacted. Since the Project Area is located almost entirely in a wetland, construction methods such as directional boring or plowing would occur where appropriate. Construction activities would utilize appropriate erosion control measures and seeding implemented after construction as required. There would be no measurable effect on the biological environment. Local communities between Yreka and Klamath Falls would be able to take advantage of an upgraded fiber optic telecommunication system improving benefits of the human health and other public services.

Section V: CONSULTATION AND COORDINATION WITH OTHERS

List below parties contacted during the planning process. Summarize results of consultation or coordination with these parties. If the EA was circulated for public comment, also provide a summary of any significant issues raised and how they were resolved.

California-Oregon Telephone Company: Cal-Ore has developed the Project design in close coordination with the Refuge and other involved parties. Cal-Ore has conducted required investigations for impacts to cultural and natural resources.

U.S. Fish and Wildlife Service Klamath Falls: No surveys were required for the Project, however no potential bald eagle roosting trees are to be cut down and blasting is to be avoided during construction activities.

Oregon Department of Transportation: Awaiting ODOT approval

This draft EA along with a Refuge Compatibility Determination on the project was announced available for public review during August 16 -31 via local news releases and by posting on the refuge web site.

Section VI: CONCLUSIONS AND RECOMMENDATIONS

Based on the analysis contained in this document, I find that implementation of the proposed action:

XX Is compatible with the major purposes for which the area was established.

__ Is not compatible with the major purposes for which the area was established.

__ Would constitute an action significantly affecting the quality of the human environment and, therefore, recommend an EIS be prepared. (Forward EA to RO for review.)

XX Would not constitute an action significantly affecting the quality of the human environment and therefore, recommend a Finding of No Significant Impact (FONSI) be prepared. (Associate Manager signs FONSI on next page)

_____ _____
Project Leader Date

_____ _____
Klamath/Central Valley Refuge Supervisor Date

Appendix A
SIGNIFICANCE CHECKLIST

This checklist is intended to help determine whether a given alternative would affect environmental features of special legal or policy significance. The list of 23 questions can be answered with a "yes" or "no" response. For any item answered "yes," discuss under the appropriate alternative in Section IV. The more items answered "yes," the stronger the likelihood that an EIS is necessary.

WOULD IMPLEMENTATION OF THE ALTERNATIVE BE EXPECTED TO AFFECT OR INVOLVE:

1. Federally listed threatened or endangered species or their critical habitats? (If "yes," Section 7 internal consultation is required.) No - Consultation was accomplished.

2. Properties either listed in or eligible for listing in the National Register of Historic Places? (If "yes," consult with State Historic Preservation Office.)
Awaiting results. Results to be forwarded to SHIPO for concurrence.

3. Either surface or subsurface disturbance? (If "yes," consult with SHIPO.) Yes

4. Major loss or alteration of natural wetlands that would adversely affect biological productivity, habitat diversity, flood storage capacity, or aquifer recharge capacity? (If "yes," see FWS flood plain/wetland regulations in November 20, 1979, issue of Federal Register.) No

5. Areas within the 100-year flood plain, in terms of increasing the flood hazard potential? (If "yes," see November 20, 1979, issue of Federal Register.) No

6. Natural resources within the officially designated boundary of the State coastal zone? (If "yes," consult with State Coastal Zone Management Office.) No

7. Discharge of dredged or fill materials in waters of the U.S. or adjacent wetlands? (If "yes," Corps of Engineers' Section 404 permit is required.) Yes

8. Structures or facilities within, under or above a navigable waterway? (If "yes," Corps of Engineers' Section 10 permit is required.) No

9. River segments designated for inclusion within the National Wild and Scenic Rivers System? (If "yes," consult with National Park Service.) No

10. Any area included within the National Wilderness Preservation System? No

11. Use of toxic or environmentally hazardous substances, such as pesticides, herbicides, rodenticides, etc? (If "yes," consult with Environmental Contaminant Specialist, OR.) No

12. Significant degradation of water quality? (If "yes," consult with State water quality agency and/or U.S. Environmental Protection Agency.) No

13. Significant degradation of air quality? (If "yes," consult with State air quality agency and/or EPA.) No

14. Society as a whole? No

15. National interests? No

16. State or regional interests? Yes

17. Long-term irreversible or irretrievable commitments of resources? No

18. Public health or safety hazards? No

19. Widespread controversy? No

20. Highly uncertain effects with unique or unknown risks? No

21. Establishment of a precedent for future actions with significant effects, or a decision in principle about a future consideration? No

22. Other actions with individually insignificant but cumulatively significant impacts? No

23. Potential violation of Federal, State or local law or requirements imposed for the protection of the environment? No

Appendix B
GENERAL ENVIRONMENTAL CHECKLIST

This checklist is intended to facilitate effect analysis for the various alternatives under consideration. The list of physical, biological and social considerations can be answered with a "yes" or "no" response. For any item answered "yes," discuss under the appropriate alternative in Section IV.

Would implementation of the alternative be expected to affect any of the physical, biological or social considerations listed below?

PHYSICAL CONSIDERATIONS

A. Climate - No

B. Air Quality - No

C. Topography
   1. Relief - No
   2. Cuts/Fills - No

D. Geology
   1. Earthquake/Landslide - No
   2. Minerals - No
   3. Energy Resource Depletion/Conservation - No
   4. Radioactive and Toxic Substances/Heavy Metals - No
   5. Erosion/Deposition - No
   6. Siltation - No
   7. Soil Quality - No

E. Hydrology
   1. Surface and Ground Water Quality/Quantity - No
   2. Absorption/Drainage - No
   3. Flooding - No
   4. Hydro/Geothermal Energy Source - No

BIOLOGICAL CONSIDERATIONS

A. Vegetation
   1. Species of Special Concern - No
   2. Critical Wildlife Habitat - No
   3. Species Diversity/Abundance - No

4. Noxious Weeds/Exotic Plants/Pathogens - No

B. Wildlife
   1. Species of Special Concern - No
   2. Species Diversity/Abundance - No
   3. Game/Non-Game Species - No
   4. Pests/Pathogens/Vectors/Predators/Feral or Exotic Animals - No

SOCIAL CONSIDERATIONS

A. Cultural
   1. Archaeologic/Historic Sites - Unknown pending final report
   2. Educational/Recreational Opportunities - No
   3. Public Access - No

B. Economic
   1. Cost - Yes
   2. Employment - No
   3. Commercial/Industrial Buildings - No
   4. Taxes/Property Values - No

C. Land Use
   1. Plans/Policies/Controls - No
   2. Development/Growth - No
   3. Farmland/Open Space, Natural Areas - No
   4. Transportation Facilities/Public Utilities - Yes

D. Social
   1. Quality of Life - No
   2. Community Cohesion - No
   3. Residents/Residences - No
   4. Population Change - No
   5. Human Health/Safety - Yes
   6. Public Services - Yes
   7. National Defense - No

E. Aesthetics
   1. Scenery - No
   2. Noise - No
   3. Odor - No

Compatibility Determination

Use: Granting of a right-of-way for installation of a fiber optic line.

Refuge Name: Lower Klamath National Wildlife Refuge, Siskiyou County, California and Klamath County, Oregon.

Establishing and Acquisition Authority(ie):

Lower Klamath NWR was established on August 8, 1908, by Executive Order No. 924 titled *Klamath Lake Reservation For Protection of Native Birds Oregon and California.*

Executive Order No. 924 was subsequently modified by four subsequent Executive Orders reducing the size of the refuge from its original 81,619 acres to 46,902 acres. They are as listed below:

Executive Order No. 2200 dated 14 May, 1915, titled *Second Executive Order Klamath Lake Reservation For Protection of Native Birds Oregon and California.*

Executive Order No. 3187 dated 2 December 1919 titled *Executive Order.*

Executive Order No. 3422 dated March 28, 1921 titled *Third Executive Order Klamath Lake Reservation.*

Executive Order 8475 dated July 10, 1940 titled *Executive Order 8475.*

The Kuchel Act of 1964 (16 U.S.C. 695 et seq.)

Refuge Purpose(s):

" . . . as a preserve and breeding ground for native birds," (Executive Orders No. 924, No. 2200, No.3187, No. 3422 and No. 8475).

" . . . dedicated to wildlife conservation . . . for the major purpose of waterfowl management, but with the full consideration to optimum agricultural use that is consistent therewith." (The Kuchel Act of 1964).

National Wildlife Refuge System Mission:

The mission of the National Wildlife Refuge System is "to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans."

Description of Use(s):

Cal-Ore Telephone Company would be granted a right-of-way and allowed to install 0.75 miles of fiber optic line through Lower Klamath National Wildlife refuge alongside U.S. Highway 97 within the current Highway right-of-way. The installation process would involve the use of heavy construction equipment including large tractors, cable plows, trenchers, backhoes, and reel equipment trucks. Depending on topography and other physical characteristics of the landscape, buried cable would be installed using one or more of the following three methods: plow, trench, and directional bore. The line would be buried at a depth of approximately 36 inches. Cables installed by plowing is accomplished by creating a narrow slit, generally 2" to 4" wide with a special plow. After plowing and cable installation, the trench is generally closed by driving a tractor track along the slit to seal the surface.

Availability of Resources:

An equitable fee for the issuance of the right-of-way is assessed by the FWS realty office as per Department of Interior policy. Most of the environmental compliance documentation was completed by Cal-Ore Telephone Company through an environmental consulting firm, JBR Environmental Consultants Inc. Maintenance of the right-of-way will be the responsibility of Cal-Ore Telephone and the maintenance area will fall within the existing Highway 97 right-of-way area. Consequently, the refuge will incur only minor administrative costs associated with granting the right-of-way and monitoring use (to ensure that it complies with right-of-way requirements and stipulations of this Compatibility Determination) would occur as a minor task incidental to other work.

Anticipated Impacts of the Use(s):

Surface disturbance associated with the project is expected to be minimal. All disturbed soil associated with boring and plowing would be replaced and restored to match pre-construction conditions. Disturbed soils would likely naturally revegetate within one or two growing seasons. The construction schedule would occur in the fall so as not to interfere with the reproductive cycles of sensitive plants and animals. There would be no impact to refuge purpose species "native birds" and "waterfowl" or to threatened or endangered species. Although there are many

wildlife species, including listed species that use the Refuge, the activities associated with the project would create disturbance not unlike routine road maintenance activities associated with the current Highway 97 right-of-way. Cultural sites identified along the alignment would not be impacted. Since the project area is located entirely within a seasonal wetland, construction activities would halt during periods when the soil is too wet to support equipment. Construction activities would utilize appropriate erosion control measures with seeding implemented after construction. There would be no measurable effect on the biological environment. Local communities between Yreka and Klamath Falls would be able to take advantage of an upgraded fiber optic telecommunication system improving benefits of the human health and other public services.

An assessment of the impacts of this activity is detailed in the Final Environmental Assessment, Yreka, CA to Klamath Falls, OR Fiber Optic Cable Project, July 2001.

Public Review and Comment:

A draft EA and CD was posted on the refuge internet website on August 16, 2001. A news release to local newspapers as to the availability of the EA and CD, with a comment period of August 15 though August 31 was released.

Determination (check one below):

___ Use is Not Compatible

_XX_ Use is Compatible With Following Stipulations

Stipulations Necessary to Ensure Compatibility:

Right-of-way for the fiber optic line will fall within the current Highway 97 right-of-way.

Construction activities will occur in the fall when this seasonal wetland is dry.

Justification:

Granting of an additional/overlay right-of-way for an underground fiber optic line within the confines of the existing Highway 97 right-of-way will not materially interfere with the purposes of the refuge or the mission of the National Wildlife Refuge System. It's presence will be visually undetectable.

Compatibility Determination (cont'd.)

Mandatory Re-Evaluation Date (provide month and year for "allowed" uses only):

_____ Mandatory 15-year Re-Evaluation Date (for priority public uses)

__XX_____ Mandatory 10-year Re-Evaluation Date (for all uses other than priority public uses)

NEPA Compliance for Refuge Use Decision (check one below):

___ Categorical Exclusion without Environmental Action Statement

___ Categorical Exclusion and Environmental Action Statement

_XX Environmental Assessment and Finding of No Significant Impact

___ Environmental Impact Statement and Record of Decision

Refuge Determination

Prepared by: _____ _____

(Signature) (Date)

Refuge Manager/
Project Leader
Approval: _____ _____

(Signature) (Date)

Concurrence

Refuge Supervisor: _____ _____

(Signature) (Date)

Regional Chief,
National Wildlife

Refuge System: _____ _____

(Signature) (Date)

California/Nevada
Operations Manager
(for CA and NV): _____ _____

(Signature) (Date)